

=> s pigment and steric and organic ionic and amphiphilic

132460 PIGMENT

66987 STERIC

320310 ORGANIC

244077 IONIC

51 ORGANIC IONIC

(ORGANIC(W) IONIC)

14088 AMPHIPHILIC

L1 0 PIGMENT AND STERIC AND ORGANIC IONIC AND AMPHIPHILIC

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132460 PIGMENT

66987 STERIC

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L2 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

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TITLE: Modified pigments having **steric** and **amphiphilic** groups

INVENTOR(S): Belmont, James A.

PATENT ASSIGNEE(S): Cabot Corporation, USA

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| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1220879 | A1 | 20020710 | EP 2000-967166 | 20000929 |
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AB Various modified **pigment** products are described which are preferably capable of being dispersed in a variety of materials such as coatings, inks, toners, films, plastics, polymers, elastomers, and the like. The modified pigments are pigments having attached (a) at least one **steric** group and (b) at least one organic **ionic** group and at least one **amphiphilic** counterion, wherein the **amphiphilic** counterion has a charge opposite to that of the organic **ionic** group. In addition, inks, coatings, toners, films, plastics, polymers, elastomers, and the like containing the modified **pigment** products of the present invention are described. Methods of making the modified **pigment** products are also described. Thus, mixing 600 g carbon black (surface area 200 m²/g; DBP absorption 117 mL/100 g) with 31.5 g sulfanilic acid, adding a solution of 6.2 g of NaNO₂ in 600 g of

water, mixing for about 10 min, and drying in an oven at 70° gave a carbon black bearing 0.22 mmol C₆H₄SO₃Na groups, 20 g of which was combined with 26.9 g H₂NC₆H₄CO₂(C₃H₆O)_nC₄H₉ and 2.3 g methanesulfonic acid in a mixture of 50 mL water and 150 mL 2-butanone, stirred at room temperature for 1 h and at 60° for 1 h, mixed with a mixture of 4-CH₃CH(NH₂)C₆H₄(OC₃H₆)₃OH 7.5, methanesulfonic acid 0.38, water 40 and 2-butanone 40 g, stirred for 1 h and worked up to give a carbon black bearing polymeric group and **amphiphilic** salt of C₆H₄SO₃- group.

REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT